

Embodied Legal Education: Incorporating Another Part of Bloom's Taxonomy

SUSAN P. LIEMER¹

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"All the ills of mankind, all the tragic misfortunes that fill the history books, all the political blunders, all the failures of the great leaders have arisen merely from a lack of skill at dancing."²

I. INTRODUCTION

This article starts with a brief exercise. It is not an academic exercise though; it is a physical exercise:

As you are able, please stand up and reach for the ceiling. Yes, that's it, stand up and really stretch your hands overhead and reach for the ceiling. Enjoy a good stretch. Yes, I mean it, and I mean everybody. As you are able, stand and reach for the ceiling. Doesn't that feel good? Has everyone had a good stretch? Okay then, please sit down now and continue reading.

What just happened? You just stretched your back and arm muscles, breathed deeper, raised your blood pressure, increased the amount of oxygen in your bloodstream, and became more alert. You prepared your body for a few minutes of sedentary time and made your brain ready to be more active. You will likely read and recall this article more quickly and easily than if you had not stood up and stretched.

I usually teach a class that runs for an hour and fifteen minutes. I once read that the maximum attention span for an adult human being is only fifty

1. Professor of Law & Director of Legal Methods & Communication at Elon University School of Law. Thank you to Professor Sharon Walter for generously lending the book that was the key to unlocking the vocabulary necessary for this article, to Professor Nancy Strohmeier for expert research assistance, and to Professor Emerita Donna Wilson for letting me take her university dance classes. Special thanks to the American Red Cross for requiring me to write lesson plans for certification as a Water Safety Instructor, when I was in high school.

2. Molière, *The Bourgeois Gentleman (Le Bourgeois Gentilhomme)* (1670) ("Tous les malheurs des hommes, les travers funestes dont les histoires sont remplies, les bévues des politiques et les manquements des grands capitaines, tout cela n'est venu que faute de savoir danser.").

minutes.³ If my lesson plan does not include an opportunity for movement, after about forty or forty-five minutes, I ask my students to do the exercise you have just done. I use the language in the second paragraph above, and dub this exercise our “seventh inning stretch.”⁴ Sometimes I do the exercise a little sooner, sometimes a little later, looking for a natural break in the lesson plan. I will ignore one student yawning, but when I see two yawns, I may abandon the lesson plan at the most logical time for a quick break and call for a seventh inning stretch early.

How do students respond? The first time in the semester that I do this exercise, the students look skeptical and reluctant. Once they stand up and stretch though, they are reluctant to sit down. For the rest of the semester, they never hesitate to stand and stretch when asked.

What about students with physical disabilities? I always start with the phrase “as you are able.” If a student who uses a wheel chair looks askance, I simply repeat the instructions with appropriate non-verbals, and the student soon reaches for the ceiling. One semester, a student with an injured arm in a sling reached with the other arm. No student has ever complained—not in class, not in individual office conferences, and not in anonymous written course evaluations.

(Please note that *every* suggestion in this article assumes professors will provide reasonable accommodations for students who receive accommodations. Likewise, every suggestion assumes professors will be sensitive to the privacy needs of students receiving accommodations.)

Why am I telling you about something so obvious as the fact that you will be more alert if you stretch for a moment and wake yourself up? Well, when was the last time you mentioned that fact to your students? Have you taught them to be attuned to the myriad physical aspects of their legal education and future careers? This article encourages you to do so.

We law professors are in the business of training minds for the practice of law. Our students enter law school assuming they will be doing mental work, learning by using their brains. But of course our students also inhabit bodies.⁵ Over the course of their legal education, they receive occa-

3. More recent research suggests an eight *second* attention span, although most healthy adults have the ability to refocus and stay focused on a topic for many minutes at a time. See Kevin McSpadden, *You Have a Shorter Attention Span Than a Goldfish*, TIME (May 14, 2015), <http://time.com/3858309/attention-spans-goldfish/>; James B. Levy, *Teaching the Digital Caveman: Rethinking the Use of Classroom Technology in Law School*, 19 CHAPMAN L. REV. 241, 256–64 (2016) (explaining the human brain’s attention capacity and its implications for adult learning); Shalini Jandial George, *Teaching the Smartphone Generation: How Cognitive Science Can Improve Learning in Law School*, 66 MAINE L. REV. 164, 175–79 (2013) (discussing the challenges to law students’ attention and focus in class).

4. See Michael Aubrecht, *The Seventh Inning Stretch—A Historical Perspective*, http://www.baseball-almanac.com/articles/7th_inning_stretch.shtml (last visited Sept. 17, 2017).

5. “[P]art of who we are is an embodied people We do not have bodies; we *are* bodies” Celeste Snowber, *Dance as a Way of Knowing*, in BODIES OF KNOWLEDGE:

sional and haphazard instruction about what to do with those bodies. At Orientation, they might hear advice about the importance of getting a good night's sleep. In upper level elective courses, a law student might learn to walk toward a jury to emphasize a point or to speak clearly at oral argument. Opportunities abound, however, for infusing legal education with physical education,⁶ in the broadest sense of the term, and helping students reap the benefits.

Law students need physical education to understand how their bodies support their mental work.⁷ Law students need physical education to understand how their bodies communicate, beyond the words they say.⁸ Conversely, law students need physical education to understand how other people's bodies are communicating to them, beyond the words others speak.⁹ Attending to the corporeal also can help a law student gain more empathy for and insight into the perspectives of others, including clients, co-

EMBODIED LEARNING IN ADULT EDUCATION 53, 55 (Randee Lipson Lawrence ed., 2012) [hereinafter Snowber, *Knowing*]; "[N]o matter what their work, individuals do not somehow divest themselves of their corporeality . . ." MARJORIE O'LOUGHLIN, EMBODIMENT AND EDUCATION: EXPLORING CREATORIAL EXISTENCE 95 (2006).

6. See *infra* text accompanying notes 98–114 (providing some examples of ways in which to add relevant physical tasks to law school courses).

7. ("Law students . . . can benefit from developing a neuro-science-based understanding of how to optimize their own cognition.") Debra S. Austin, *Killing Them Softly: Neuroscience Reveals How Brain Cells Die from Law School Stress and How Neural Self-Hacking Can Optimize Cognitive Performance*, 59 LOY. L. REV. 791, 799 (2013) (citing MARGARET GLICK, THE INSTRUCTIONAL LEADER AND THE BRAIN: USING NEUROSCIENCE TO INFORM PRACTICE 13 (2011)).

8. See generally Noam Ebner & Jeff Thompson, @ *Face Value? Nonverbal Communication & Trust Development in Online Video-based Mediation* (2014), <https://ssrn.com/abstract=2395857> (describing the importance of nonverbal communication skills for lawyers who are mediators); Elizabeth G. Porter, *Taking Images Seriously*, 114 COLUM. L. REV. 1687, 1753 n.305 (2014) (quoting NEIL FEIGENSON & CHRISTINA SPIESEL, LAW ON DISPLAY 4 (2009) (criticizing lawyers' assumption that "thinking in words is the only thinking there is")); Emily Beausoleil & Michelle LeBaron, *What Moves Us: Dance and Neuroscience Implications for Conflict Approaches*, 31 CONFLICT RESOL. Q. 133, 151 (2013) (summarizing important ways that "the wisdom of the body in motion" helps resolve conflicts); Miriam Aziz, *Were You with Me? Creativity, Dialogue and Self-Expression in Legal Process Narratives*, in THE ARTS AND THE LEGAL ACADEMY: BEYOND TEXT IN LEGAL EDUCATION 175, 177 (Zenon Bankowski et al. eds., 2012) (criticizing legal education's "focus on what is being said at the expense of body language"); Pamela Peters, *Gaining Compliance through Non-Verbal Communication*, 7 PEPP. DISP. RESOL. L.J. 87, 88 (2007) (stating that lawyers who use non-verbals purposefully are "more powerful and effective communicators and professionals"); Allison Leotta, *Motion Applied: Your Body Language During Trial Can Be Just as Important as What You Say*, ABA JOURNAL 22–23 (Dec. 2016).

9. ("Movement never lies. It is a barometer telling the state of the soul's weather to all who can read it.") MARTHA GRAHAM, BLOOD MEMORY 4 (Doubleday 1991); see also MARCO IACOBONI, MIRRORING PEOPLE: THE NEW SCIENCE OF HOW WE CONNECT WITH OTHERS 3 (Farrar, Strauss & Giroux eds., 2008) ("[W]hat do we human beings do all day long? We read the world, especially the people we encounter."); Peters, *supra* note 8, at 88 (stating the need for lawyers to "thoughtfully observe those around them.").

workers, and adversaries.¹⁰ Similarly, understanding the body's role in lawyering may help alleviate some of the "isms" and the obstacles faced disparately by many in the legal academy.¹¹ When law students gain body awareness and understand better how they move through and use space, their "soft skills" will improve.¹² Finally, corporeal tasks are inherent in the experiential learning that helps students learn and that the ABA accreditation standards now require.¹³ Indeed, "[t]his isn't knowledge that can be told or read about; it must be experienced."¹⁴

10. Embodied learning provides "a means of developing empathy and respecting diversity [A]wareness of and respect for our own somatic responses and the sharing of insights about embodied experiences open us to alternative perspectives." Sandra Kerka, *Somatic/Embodied Learning and Adult Education*, Trends and Issues Alert No. 32, ERIC Clearinghouse on Adults, Career, and Vocational Education (2002) (internal citations omitted). "Focusing on the effects of kinaesthetic empathy as a result of watching others move can help law students realize how the physicality of other people affects their own physicality and how this relates to their thought process." Sophia Lycouris & Wendy Timmons, *Physical Literacy in Legal Education: Understanding Physical Bodily Experiences in the Dance Environment to Inform Thinking Processes within Legal Education*, in THE ARTS AND THE LEGAL ACADEMY: BEYOND TEXT IN LEGAL EDUCATION, 55; see also Anne E. Wagner & Riyad A. Shahjahan, *Centering Embodied Learning in Anti-Oppressive Pedagogy*, 20 TEACHING IN HIGHER EDUCATION 244–54 (2015) (exploring how embodied learning is "integral to the project of teaching about social justice").

11. See Shauna Butterwick & Jan Selman, *Embodied Knowledge & Decolonization: Walking with Theater's Powerful and Risky Pedagogy*, in BODIES OF KNOWLEDGE: EMBODIED LEARNING IN ADULT EDUCATION, *supra* note 5, at 61 (referring to "sexism, racism, classism, and homophobia . . . operating in the educational system" and the "transformational power" of "embodied pedagogy."). Indeed, "[p]rocesses of colonization can separate mind and body—that separation . . . allows domination and manipulation." *Id.* at 64. "[E]mbodied activities contribute to a remembering and naming of oppression but also . . . may . . . generate new knowledge that leads to enfranchisement and action." *Id.* at 62.

12. "[P]hysical literacy" can help law students gain observation skills that "facilitate a shifting of frame of mind" to aid problem solving. Lycouris & Timmons, *supra* note 10, at 58–59. Physical literacy can also help law students gain improvisation skills, including the ability to engage in productive "dialogue, sustained listening, widening of community, absence of judgement, and acceptance of loss of control." *Id.* at 60 (quoting T. Piper, *The Improvisational Flavour of Law, the Legal Taste of Improvisation*, in 6 CRITICAL STUDIES IN IMPROVISATION/ÉTUDES CRITIQUES EN IMPROVISATION 1, 2 (2010)). Thus, enhancing their physical education may help law students "become appropriately equipped to deal with moral dilemmas and ambiguity in their professional lives." Lycouris & Timmons, *supra* note 10 at 61.

13. Standards 303(a)(3) & 304(a), *ABA Standards and Rules of Procedure for Approval of Law Schools 2015-20* (ABA 2015), http://www.americanbar.org/groups/legal_education/resources/standards.html.

14. Snowber, *Knowing*, *supra* note 5, at 55.

II. THERE'S MORE THAN YOU MAY KNOW TO BLOOM'S TAXONOMY.

In the United States, law schools typically hire professors straight from law practice.¹⁵ Most law professors do not have formal teacher training and must learn on the job. In recent decades, resources for law professors to learn how to teach have proliferated, likely to the benefit of everyone with a stake in legal education. The Association of American Law Schools presents a summer workshop for new law professors,¹⁶ the Institute for Law Teaching holds annual conferences and publishes a newsletter,¹⁷ The Journal of Legal Education regularly publishes articles on pedagogy,¹⁸ and the teaching of various subjects is the primary focus of, or a part of, some subject area academic conferences for law professors.¹⁹ In addition, legal scholarship about pedagogy has paralleled the profusion of conferences covering how to teach law.²⁰

15. Richard E. Redding, "Where Did You Go to Law School?" *Gatekeeping for the Professoriate and Its Implications for Legal Education*, 53 J. LEGAL EDUC. 594, 601 (2003) (reporting almost 87% of law professors had law practice experience in 2001); Susan P. Liemer & Hollee S. Temple, *Did Your Legal Writing Professor Go to Harvard?: The Credentials of Legal Writing Professors at Hiring Time*, 46 LOUISVILLE L. REV. 383, 391, 393, 396-97 (2007-2008) (describing an upward trend, from 1975 to 2001, in the percentage of United States law professors who had law practice experience).

16. See *2017 AALS Workshop for New Law School Teachers*, ASSOCIATION OF AMERICAN LAW SCHOOLS, <https://www.aals.org/nlt2017/> (last visited Feb. 1, 2018).

17. See generally INSTITUTE FOR LAW TEACHING AND LEARNING, <http://lawteaching.org/index.php> (last visited Jan. 20, 2018).

18. See *Journal of Legal Education*, ASSOCIATION OF AMERICAN LAW SCHOOLS, <http://jle.aals.org/home/> (last visited Jan. 20, 2018).

19. See, e.g., LEGAL WRITING INSTITUTE, <http://www.lwionline.org/> (last visited Jan. 20, 2018) (providing information on the Legal Writing Institute's biennial conferences and "related conferences"); *Biennial Conference*, ASSOCIATION OF LEGAL WRITING DIRECTORS, <http://www.alwd.org/events/biennial-conference/> (last visited Jan. 20, 2018) (providing information on the Association of Legal Writing Directors biennial conferences); *39th Annual Conference on Clinical Legal Education*, ASSOCIATION OF AMERICAN LAW SCHOOLS, <https://www.aals.org/clinical2017/> (last visited Feb. 1, 2018) (providing information on an annual workshop for law clinic professors); ASSOCIATION OF AMERICAN LAW SCHOOLS, *supra* note 16 (providing information on an annual workshop for all new law teachers); *2016 SALT Teaching Conference & LawCrit/SALT Faculty Development Workshop*, SOCIETY OF AMERICAN LAW TEACHERS, <https://www.saltlaw.org/events/salt-2016-teaching-conference-2/> (last visited Jan. 20, 2018) (providing information on the Society of American Law Teachers' annual conference); *Conferences*, INSTITUTE FOR LAW TEACHING AND LEARNING, <http://lawteaching.org/conferences/> (last visited Jan. 20, 2018) (providing information on the Institute for Law Teaching's conferences).

20. See *Selected Bibliography on Legal Writing Pedagogy*, CUNY SCHOOL OF LAW, <http://www.law.cuny.edu/legal-writing/faculty/pedagogy-bibliography.html#top> (last visited Oct. 7, 2017); Mary Olszewska & Thomas E. Baker, *An Annotated Bibliography on Law Teaching*, 18 PERSPECTIVES: TEACHING LEGAL RESEARCH & WRITING 34 (2010); Arturo López Torres, *MacCrate Goes to Law School: An Annotated Bibliography of Methods for Teaching Lawyering Skills in the Classroom*, 77 NEB. L. REV. 132 (1998); Arturo López Torres & Mary Kay Lundwall, *Moving Beyond Langdell II: An Annotated Bibliography of Current Methods for Teaching Law*, 29 GONZAGA L. REV. 1 (1993-1994).

These exchanges sometimes move beyond “how-to” sessions and introduce law professors to learning theory.²¹ As a result, many law professors in the United States are now familiar with Bloom’s taxonomy, first published in 1956.²² This “taxonomy” is a hierarchy of learning objectives.²³ “Bloom’s taxonomy has provided a durable and effective structure for characterizing developmental stages of learning for many years, and it is the basis upon which learning has been understood in all sorts of courses and curricula.”²⁴

The goal of Bloom’s taxonomy has always been:

1. To help teachers, administrators, professional specialists, and research workers who deal with curricular and evaluation problems to discuss their problems with greater precision.
2. To facilitate the exchange of information about curricular developments and evaluation devices.
3. To suggest the kinds of objectives that can be included in a curriculum.
4. To help teachers and others gain a perspective on the emphasis given to certain behaviors by a particular set of educational plans.

21. See, e.g., Elizabeth Adamo Usman, *Making Legal Education Stick: Using Cognitive Science to Foster Long-Term Learning in the Legal Writing Classroom*, 29 GEO. J. LEGAL ETHICS 355 (2016); Donald J. Kochan, “Learning” Research and Legal Education: A Brief Overview and Selected Bibliographical Survey, 40 SW. L. REV. 449 (2011); Linda S. Anderson, *Incorporating Adult Learning Theory into Law School Classrooms: Small Steps Leading to Large Results*, 5 APPALACHIAN L.J. 127 (2006); M. H. Sam Jacobson, *Learning Styles and Lawyering: Using Learning Theory to Organize Thinking and Writing*, 2 J. ASS’N LEGAL WRITING DIRECTORS 27 (2004); Michael Hunter Schwartz, *Teaching Law by Design: How Learning Theory and Instructional Design Can Inform and Reform Law Teaching*, 38 SAN DIEGO L. REV. 347 (2001); Clifford S. Zimmerman, “Thinking Beyond My Own Interpretation: Reflections on Collaborative and Cooperative Learning Theory in the Law School Curriculum”, 31 ARIZ. ST. L.J. 957 (1999); Paula Lustbader, *Construction Sites, Building Types, and Bridging Gaps: A Cognitive Theory of the Learning Progression of Law Students*, 33 WILLAMETTE L. REV. 315 (1997); Eileen B. Cohen, *Using Cognitive Learning Theories in Teaching Legal Research*, 1 PERSP.: TEACHING LEG. RES. & WRITING 79 (1993); Helene S. Shapo, *Brutal Choices: Implications of Cognitive Theory for Teaching Writing*, 2 PERSP.: TEACHING LEG. RES. & WRITING 6 (1993); Eileen B. Cohen, *Using Cognitive Learning Theories in Teaching Legal Research*, 4 PERSP.: TEACHING LEG. RES. & WRITING 79 (1992); David W. Champagne, *Improving Your Teaching: How Do Student’s Learn?*, 83 L. LIB. J. 85 (1991). For a one-paragraph summary of modern learning theories and references to longer summaries of each type, see DAVID CHASE, *et al.*, ASSESSMENT IN CREATIVE DISCIPLINES 22 (Common Ground Pub’g 2014) [hereinafter ASSESSMENT].

22. See generally TAXONOMY OF EDUCATIONAL OBJECTIVES: THE CLASSIFICATION OF EDUCATIONAL GOALS, HANDBOOK I, COGNITIVE DOMAIN (Benjamin S. Bloom, ed., David McKay Co. 1956) [hereinafter HANDBOOK I].

23. *Id.* at 12 (“[T]his taxonomy is designed to be a classification of the student behaviors which represent the intended outcomes of the educational process.”).

24. ASSESSMENT, *supra* note 21, at 24.

5. To help curriculum builders to specify objectives so that it becomes easier to plan learning experiences and prepare evaluation devices.²⁵

When most law professors refer to Bloom's taxonomy, they are referring only to Bloom's taxonomy of learning objectives in the cognitive domain.²⁶ There have been elaborations on that cognitive domain taxonomy over the years.²⁷ There is nothing magical or sacrosanct about that taxonomy; it simply provides a helpful structure for sequencing learning objectives for abstract thinking skills. There are many other types of learning theories,²⁸ with theorists in the fields of education and psychology now being joined by experts in the field of neuroscience.²⁹

A law professor without a degree in education is less likely to be familiar with the fact that Bloom's taxonomy originally contemplated three

25. Elizabeth Jane Simpson, *The Classification of Educational Objectives, Psychomotor Domain 1* (1966) [hereinafter Simpson, *Educational Objectives I*], (quoting & paraphrasing HANDBOOK I, *supra* note 22, at 1–2), <http://files.eric.ed.gov/fulltext/ED010368.pdf>, (reporting on work done under a grant from the U.S. Department of Health, Education, and Welfare, Office of Education); Elizabeth J. Simpson, *The Classification of Educational Objectives in the Psychomotor Domain*, in 3 CONTRIBUTIONS OF BEHAVIORAL SCIENCE TO INSTRUCTIONAL TECHNOLOGY: THE PSYCHOMOTOR DOMAIN 43, 44 (Gryphon House 1972) [hereinafter Simpson, *Educational Objectives III*], (quoting & paraphrasing HANDBOOK I, *supra* note 22, at 1–2).

26. See HANDBOOK I, *supra* note 22, app. at 201–07 (providing a “Condensed Version of the Taxonomy of Educational Objectives, Cognitive Domain”). Benjamin Bloom and his working committee were themselves “primarily concerned with the cognitive domain.” *Id.* at 19.

27. See, e.g., A TAXONOMY FOR LEARNING, TEACHING, AND ASSESSING: A REVISION OF BLOOM'S TAXONOMY OF EDUCATIONAL OBJECTIVES (Lorin W. Anderson & David R. Krathwohl, eds., 2001); ROBERT J. MARZANO, DESIGNING A NEW TAXONOMY OF EDUCATIONAL OBJECTIVES (2001); see also Hillary Burgess, *Beyond Learning Objectives: Overview of the Taxonomy of Cognitive Legal Learning Objectives and Outcome Measurements* (2017) [hereinafter Burgess, *Legal Learning*], <https://ssrn.com/abstract=2898648> (proposing a legal education specific taxonomy of cognitive learning objectives); Hillary Burgess, *Deepening the Discourse Using the Legal Mind's Eye: Lessons from Neuroscience and Psychology That Optimize Law School Learning*, 29 QUINNIPIAC L. REV. 1, 8–21 (2011) [hereinafter Burgess, *Deepening*] (summarizing the cognitive domain as described in MARZANO, *supra*); Paul D. Callister, *Time to Blossom: An Inquiry into Bloom's Taxonomy as a Hierarchy and Means for Teaching Legal Research Skills*, 102 L. LIBR. J. 191 (2010) (proposing an adaptation of Bloom's taxonomy for legal research curricula).

28. For helpful summaries of mainstream learning theories, see Lee Dunn, *Theories of Learning*, in LEARNING AND TEACHING BRIEFING PAPERS SERIES (2002), www.brookes.ac.uk/services/ocsl/resources/briefing_papers; ASSESSMENT, *supra* note 21, at 22–32.

29. See, e.g., MIND, BRAIN, AND EDUCATION: NEUROSCIENCE IMPLICATIONS FOR THE CLASSROOM (David Sousa ed., 2010); PATRICIA WOLFE, BRAIN MATTERS: TRANSLATING RESEARCH INTO CLASSROOM PRACTICE (2010). In the law school context specifically, see generally Austin, *supra* note 7; Burgess, *Deepening*, *supra* note 27; Jennifer M. Cooper, *Smarter Law Learning: Using Cognitive Science to Maximize Law Learning*, 44 CAP. U. L. REV. 551, 576–88 (2016) (suggesting specific applications of the cognitive science for law professors to use).

distinct domains: cognitive, affective, and psychomotor.³⁰ “Each of the three domains can apply to teaching and learning in any discipline.”³¹ The fact that the domains may overlap or more than one may be relevant to a learning task has long been acknowledged.³² Recent research and scholarship suggests strong connections cause synergies between the domains.³³

Most scholarship on legal pedagogy that addresses Bloom’s taxonomy focuses on the cognitive domain.³⁴ Increasingly, legal education scholarship has begun to address the affective domain, even when it is not so-named.³⁵ Far less scholarship explores the psychomotor domain in the context of legal education.³⁶ This article aims to acknowledge a place for the

30. HANDBOOK I, *supra* note 22, at 7 (“Our original plans called for a complete taxonomy in three major parts—the cognitive, the affective, and the psychomotor domains.”).

31. ASSESSMENT, *supra* note 21, at 24. In the legal academy, Professor Debra Austin refers obliquely to the three domains, in a different order, when she acknowledges that “[l]earning includes cognitive components, such as memorizing rules of civil procedure; motor components, such as the typing necessary to take notes on a laptop; and affective components, such as feeling embarrassed if unprepared when called upon in class.” Austin, *supra* note 7, at 807.

32. DAVID R. KRATHWOHL, BENJAMIN S. BLOOM, & GERTRAM B. MASIA, TAXONOMY OF EDUCATIONAL OBJECTIVES, THE CLASSIFICATION OF EDUCATIONAL GOALS, HANDBOOK II, AFFECTIVE DOMAIN 8 (1964) [hereinafter HANDBOOK II] (note: the publisher put both Handbook I and Handbook II in a single volume in its 1972 printing) (“[A]lthough one could place an objective very readily in one of the three major domains or classes, no objective in one class was totally devoid of some components of the other two classes.”); Simpson, *Educational Objectives I*, *supra* note 25, at 31 (acknowledging that the domains “are closely related” and “a single educational objective might have a particular significance in one domain and another [significance] in another domain.”).

33. See, e.g., Ann L. Swartz, *Embodied Learning and Patient Education: From Nurses’ Self-Awareness to Patient Self-Caring*, in BODIES OF KNOWLEDGE: EMBODIED LEARNING IN ADULT EDUCATION, *supra* note 5, at 17 (describing “embodied learning” and how “cognition . . . is embodied”) (emphasis in original); Austin, *supra* note 7, at 808–14 (describing the neurobiology of cognition, including its emotional and physical components); Burgess, *Deepening*, *supra* note 27, at 45–47 (describing the benefits of “multi-modal learning,” including “kinesthetic learning”); *id.* at 51 (explaining that using different brain functions and areas assists learning by lessening cognitive load); Aziz, *supra* note 8, at 180–85 (discussing cognitive and affective legal skills improved via a dance education experience).

34. See Kochan, *supra* note 21, at 454 (providing a categorized bibliography on law teaching and reporting that “in the last several decades . . . a growing body of law-specific learning and teaching literature has emerged.”).

35. See, e.g., Colin James & Felicity Wardhaugh, *Enhancing Emotional Competencies with Law Students*, 12 INT’L J. CLINICAL LEGAL EDUC. 53 (2016); Ruth Ann McKinney, *Depression and Anxiety in Law Students: Are We Part of the Problem and Can We Be Part of the Solution?* 8 LEG. WRITING 229 (2002); Andrew H. Benjamin et al., *The Role of Legal Education in Producing Psychological Distress Among Law Students and Lawyers*, B. FOUND. RES. J. 225 (1986).

36. Relevant publications not otherwise cited in this article include: Michael J. Higdon, *Oral Advocacy and Vocal Fry: The Unseemly, Sexist Side of Nonverbal Persuasion*, 13 LEGAL COMM. & RHETORIC: JALWD 209 (2016); Michael J. Higdon, *Oral Argument and Impression Management: Harnessing the Power of Nonverbal Persuasion for a Judicial Audience*, 57 U. KAN. L. REV. 631 (2009); Charles R. Calleros, *Reading, Writing*,

psychomotor domain in the learning theory and learning objectives applicable to legal education.

A. A. The cognitive domain heads up legal education.

As the term suggests, the cognitive domain of Bloom's taxonomy focuses on learning objectives for students' abstract thinking skills. Starting with the most fundamental and working toward the most advanced one, those learning objectives, in order, are:

- knowledge
- comprehension
- application
- analysis
- synthesis
- evaluation.³⁷

Each skill builds on and incorporates the previous one, as the skills become more sophisticated and complex.

This domain of the taxonomy helps law professors articulate the progression of core cognitive skills that students who aspire to be attorneys need to develop, first as undergraduates and then as law students. Bloom's taxonomy in the cognitive domain happens to include the core thinking skills that law students need to acquire and strengthen to be good attorneys, so it is a good fit for legal education and has proven a useful tool for law professors.³⁸ Law schools in the United States have focused on teaching those cognitive skills for the last century, and, thanks to the work of the authors of the Carnegie report, we have evidence that law professors are generally quite good at teaching those cognitive skills.³⁹ After all, a legal career provides a life of the mind, and the cognitive domain concerns the learning of the mind.

and Rhythm: A Whimsical, Musical Way of Thinking about Teaching Legal Method and Writing, 5 LEG. WRITING 1 (1999); Bari R. Burke, *Legal Writing (Groups) at the University of Montana: Professional Voice Lessons in a Communal Context*, 52 MONT. L. REV. 373 (1991); Darby Dickerson, *Oral Reports to Supervisors*, THE SECOND DRAFT 13 (Nov. 1997).

37. HANDBOOK I, *supra* note 22, at 18.

38. *But see* Burgess, *Legal Learning*, *supra* note 27 (suggesting a law-specific refinement of Bloom's cognitive domain learning objectives).

39. WILLIAM SULLIVAN ET AL., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW 5 (The Carnegie Foundation for the Advancement of Teaching 2007) [hereinafter CARNEGIE REPORT] ("Law schools are impressive educational institutions. In a relatively short period of time, they are able to impart a distinctive habit of thinking that forms the basis for their students' development as legal professionals [W]ithin months of their arrival in law school . . . they are learning . . . to 'think like a lawyer.'") (citation omitted). The Carnegie Report considers learning in the cognitive domain to be a law student's intellectual apprenticeship. *Id.* at 28.

B. The affective domain has a supporting role in legal education.

Students' emotional development is the focus of the learning objectives in the affective domain.⁴⁰ This part of Bloom's taxonomy, published in 1964, accounts for learning related to "feelings, values, appreciation, enthusiasms, motivations, and attitudes."⁴¹ Here the learning objectives, from most fundamental to most advanced, are:

- receiving
- responding
- valuing
- organization (of a value system)
- characterization (building character).⁴²

In legal education, courses that aim to help students develop their professional identities, such as courses in professional responsibility or legal ethics, typically have some learning objectives in the affective domain.⁴³ Law school courses that require students to complete self-reflective assignments, such as in-house clinics and externships, also may state transparently learning objectives in the affective domain.⁴⁴ Courses that teach students about specific types of interactions with clients—such as negotiation, mediation, client counseling, or leadership—may include specific learning objectives related to emotional development.

Even when not accounted for in work that professors review or grade, most law school courses contain instruction within the affective domain. Most law professors explain the values of the legal profession in context in their classrooms, when relevant to a lesson's primary focus. The affective domain may also be part of lessons across the law curriculum whenever social policy and law reform are discussed.

Thus, even if they are not aware they are doing so, law professors who focus on teaching skills in the cognitive domain help their students learn in the affective domain, too. Occasional forays into the affective domain in legal education are actually so commonplace as to be unremarkable. The law is a service profession, and the affective domain concerns the learning of the lawyer's role and responsibilities within society.⁴⁵

40. See generally HANDBOOK II, *supra* note 32.

41. ASSESSMENT, *supra* note 21, at 24.

42. See HANDBOOK II, *supra* note 32, at 176–85 (providing Appendix A, "A Condensed Version of the Affective Domain of the Taxonomy of Educational Objectives.").

43. The Carnegie Report considers this aspect of law school learning to be a type of identity apprenticeship. CARNEGIE REPORT, *supra* note 39, at 15.

44. See, e.g., Robin Wellford Slocum, *An Inconvenient Truth: The Need to Educate Emotionally Competent Lawyers*, 45 CREIGHTON L. REV. 827 (2012); Paul S. Ferber, *Adult Learning Theory and Simulations—Designing Simulations to Educate Lawyers*, 9 CLIN. L. REV. 417 (2002); Fran Quigley, *Seizing the Disorienting Moment: Adult Learning Theory and the Teaching of Social Justice in Law School Clinics*, 2 CLIN. L. REV. 37 (1995).

45. See ALLI GERKMAN & LOGAN CORNETT, INST. FOR THE ADVANCEMENT OF THE AM. LEGAL SYS., FOUNDATIONS FOR PRACTICE: THE WHOLE LAWYER AND THE CHARACTER

C. *The psychomotor domain gets a little play in legal education.*

More frequently overlooked in legal education is the psychomotor domain of Bloom's taxonomy. Bloom's original publication, which focused on the cognitive domain, contained only passing mention of physical education, tacitly assuming it unimportant in higher education.⁴⁶ The second publication, with its focus on the affective domain, explained that the psychomotor domain includes learning objectives "emphasizing some muscular or motor skill, some manipulation of material and objects, or some act which requires a neuromuscular coordination."⁴⁷ Starting with this definition, in 1966 Professor Elizabeth Jane Simpson reported a taxonomy of learning objectives in this third domain of psychomotor skills,⁴⁸ which she added to in 1971.⁴⁹ All of the learning objectives in this domain relate to "physical movement, co-ordination, and use of motor-skill."⁵⁰ In order from the most basic to the most complex, those learning objectives are:

- perception
- set
- guided response
- mechanism (basic proficiency)
- complex overt response (expert)⁵¹
- adaptation
- origination.⁵²

As with the taxonomies in the cognitive and affective domains, there is nothing magical about this taxonomy of psychomotor learning objectives.⁵³ Others before⁵⁴ and since⁵⁵ its inception have found different ways

QUOTIENT 5 (2016), <http://iaals.du.edu/foundations/reports/whole-lawyer-and-character-quotient> (concluding that legal employers value aspects of good character more in new attorneys than specific legal knowledge).

46. HANDBOOK I, *supra* note 22, at 7–8 ("A third domain is the manipulative or motor-skill area. Although we recognize the existence of this domain, we find so little done about it in secondary schools or colleges, that we do not believe the development of a classification of these objectives would be very useful at present.").

47. HANDBOOK II, *supra* note 32, at 7 (finding "few such objectives in the literature.").

48. Simpson, *Educational Objectives I*, *supra* note 25.

49. Elizabeth Simpson, *Educational Objectives in the Psychomotor Domain, in BEHAVIORAL OBJECTIVES IN CURRICULUM DEVELOPMENT, SELECTED READINGS AND BIBLIOGRAPHY 60* (Miriam B. Kapfer ed., 1971) [hereinafter Simpson, *Educational Objectives II*]; Simpson, *Educational Objectives III*, *supra* note 25.

50. ASSESSMENT, *supra* note 21, at 26.

51. Simpson, *Educational Objectives I*, *supra* note 25, at 25–30.

52. Simpson, *Educational Objectives III*, *supra* note 25, at 54 & 55 (adding "adaptation" and "origination" as the most advanced learning objectives in this domain).

53. Simpson, *Educational Objectives III*, *supra* note 25, at 50 ("The major organizational principle operating is that of complexity with attention to the sequence involved in the performance of the motor act. That is, objectives that would be classified at the lower levels are less complex in nature than related objectives at upper levels. In general, they are easier to carry out. And, those at the upper levels build on those at the lower.").

to classify the steps in learning physical skills. Professor Simpson's taxonomy purposefully and closely follows Bloom's approach and fleshes out the third domain recognized in his taxonomy.⁵⁶ Her approach applies to a wide variety of physical skills. It seems more useful for legal education than narrower articulations of psychomotor learning objectives, which may be better suited to fields in which acquiring motor skills for their own sake is the primary educational goal. (Should an argument ensue as to whether Professor Simpson's is the most useful psychomotor taxonomy for legal education, I will consider my goal for this article met.)

Most of legal education sensibly concentrates its learning objectives in the cognitive and affective domains. After all, law students are training to be counselors of law, not athletes or performing artists. Professor Simpson intended the taxonomy for the psychomotor domain, however, to apply to learning in all types of higher education, from vocational training to the professions.⁵⁷ She includes references to medicine, dentistry, engineering, and architecture.⁵⁸ The education provided to law students, too, is incomplete without some toe dips into the learning accounted for by the psychomotor domain.⁵⁹ This domain concerns the learning of the body.⁶⁰

54. See, e.g., Simpson, *Educational Objectives I*, *supra* note 25, at 33–35 (listing the many sources Simpson referenced).

55. See, e.g., ANITA J. HARROW, *A TAXONOMY OF THE PSYCHOMOTOR DOMAIN: A GUIDE FOR DEVELOPING BEHAVIORAL OBJECTIVES* (1972); R.H. Dave, *Psychomotor Levels*, in *DEVELOPING AND WRITING BEHAVIORAL OBJECTIVES* 20–21 (Robert J. Armstrong ed., 1970); Alexander J. Romiszowski, *The Development of Physical Skills: Instruction in the Psychomotor Domain*, in 2 *INSTRUCTIONAL DESIGN THEORIES AND MODELS: A NEW PARADIGM OF INSTRUCTIONAL THEORY*, 457–81 (Charles M. Reigeluth ed., 1999).

56. See, e.g., Simpson, *Educational Objectives I*, *supra* note 25, at 3 (suggesting a benefit of fully developing the psychomotor taxonomy will be “rounding out the three domains, and thus providing for better study of the total field of objectives . . .”).

57. Simpson, *Educational Objectives I*, *supra* note 25, at 4 (“Specialists in vocational education, physical education, dentistry, psychology, and educational testing were among those consulted . . .”).

58. See, e.g., Simpson, *Educational Objectives I*, *supra* note 25, at 10 (quoting J. F. Parker, Jr., & E. A. Fleishman, *Ability Factors and Component Performance Measures as Predictors of Complex Tracking Behavior*, 74 *PSYCHOLOGICAL MONOGRAPHS* 1 (1960)) (referring to “such diverse activities as navigation, dentistry, and engineering.”).

59. The Carnegie Report does consider the learning of various legal skills to be a type of practice apprenticeship, although it does not describe skills in terms specific to the psychomotor domain. *CARNEGIE REPORT*, *supra* note 39, at 15.

60. See generally Celeste Snowber, *Let the Body Out: A Love Letter to the Academy from the Body*, in *EPISTEMOLOGIES OF IGNORANCE IN EDUCATION* 187 (Erik Malewski & Nathalia Jaramillo eds., 2011); *RE-ENVISIONING HIGHER EDUCATION: EMBODIED PATHWAYS TO WISDOM AND SOCIAL TRANSFORMATION* (Jing Lin et al. eds., 2013) [hereinafter Lin].

III. UNDERSTANDING PSYCHOMOTOR LEARNING OBJECTIVES IN THE CONTEXT OF LEGAL EDUCATION.

Successful law students have a lot to attend to, and not every course they take will include learning objectives at every level of the psychomotor domain. Some introduction to and facility with skills at each level of the psychomotor learning objectives, however, will enrich their legal education and legal careers. Some psychomotor skills have always been part of the “hidden curriculum”⁶¹ of law schools, a wide spectrum of skills students are expected to arrive with or acquire intuitively as they progress through the curriculum.⁶² Now that the ABA is formally requiring practice skills instruction and experiential learning,⁶³ it is time for the full spectrum of the hidden curriculum, including psychomotor skills, to be stated “out loud” as learning objectives in law school course syllabi, program plans, and assessment reports. As Professor Simpson herself said, “[m]any objectives that are *assumed* might be *stated* in order to provide for greater clarity and to insure their consideration in the selection of learning experiences and content.”⁶⁴

A. Perception

“A first step in motor activity is perception,”⁶⁵ and “the learning of motor tasks is largely a matter of learning perceptual relationships.”⁶⁶ Perception is defined as “the process of becoming aware of objects, qualities, or relations by way of sense organs.”⁶⁷

61. See generally PHILIP W. JACKSON, *LIFE IN CLASSROOMS* (1968).

62. Burgess, *Deepening*, supra note 27, at 7 (“Teaching law presupposes basic psychomotor learning such as writing and/or typing . . . or other presupposed learning from the psychomotor domain.”). Although basic penmanship is not appropriate for law school coverage, law students do benefit by learning about the benefits of handwriting class notes and course outlines. See Maria Konnikova, *What’s Lost as Handwriting Fades*, N.Y. TIMES at D1 (June 3, 2014). Similarly, law professors often erroneously assume that all law students are quick typists and adept at using word processing functions. I instruct my legal writing students on efficient word processing practices, which are new to many of them. Another example is the unspoken professional dress code that law students are expected to acquire. See Karen DaPonte Thornton, *Parsing the Visual Rhetoric of Office Dress Codes*, 12 LEGAL COMMUN. & RHETORIC: JALWD 173, 180 (2015)(citations omitted) (stating “law schools can . . . make ‘the unconscious conscious’ in the visual rhetoric of fashion”).

63. See Standards 303(a)(3) & 304(a), supra note 13; see generally ROY STUCKEY ET AL., *BEST PRACTICES FOR LEGAL EDUCATION* 165–206 (2007).

64. Simpson, *Educational Objectives I*, supra note 25, at 31; see also O’LOUGHLIN, supra note 5, at 97 (explaining how the “embodied character” of much mental and service work is “discursively submerged.”).

65. Simpson, *Educational Objectives I*, supra note 25, at 9.

66. *Id.* (citing R.M. Gagne & Harriet Foster, *Transfer to a Motor Skill from Practice on a Pictured Presentation*, 39 J. EXPERIMENTAL PSYCHOLOGY 342 (1949)).

67. Simpson, *Educational Objectives I*, supra note 25, at 19.

Perception itself entails three very basic steps: sensory stimulation, cue selection, and translation. First, a student's perception relies on the student's sensitivity to cues received by the senses.⁶⁸ For any psychomotor task, the relevant sensory stimulation may be auditory, visual, tactile, gustatory, olfactory, or kinesthetic.⁶⁹ Obviously, some of the senses come into play in legal education more than others. Hearing and vision are the main senses by which most⁷⁰ law students learn, but increased experiential learning in law schools now provides more opportunities for all law students to learn by sensing touch and movement, too.

Second, after the sensory stimulation, "cue selection" occurs, when a student decides which sensory cues to respond to for the motor task at hand.⁷¹ "Cues relevant to the situation are selected as a guide to action; irrelevant cues are ignored or discarded."⁷² Third, "translation" occurs when the student determines what the cues selected will mean for the motor task ahead, "relating of perception to action in performing a motor task."⁷³ The student may recall some experience or have some insight relevant to the sensory stimulation and cue selection.⁷⁴

An example of a simple perception learning objective in legal education might be for students in a Trial Advocacy class to accurately understand the amount and location of physical space they may use in the moot court room during a trial simulation. Accurately understanding the space an attorney can move around in while conducting a trial may seem so obvious as to be intuitive to most law professors. But a student who has never stood in a courtroom may not intuit which physical space is available to the attorneys. Visual stimulation will show most students the room,⁷⁵ but their cue selections or translations may be inaccurate. A student who has little experience on a stage or sport field may ignore space at an oblique angle to, behind, or above the body. A student who has only seen courtroom movie sets may not accurately translate from a camera's scripted visual selection to the live visual selection of the space in a courtroom. Including a simple course learning objective from the psychomotor domain that asks whether students accurately perceive the space available in the court room may prompt the professor to explain the relevance of various architectural fea-

68. *Id.* at 5.

69. *Id.* at 25-26.

70. Students with sensory disabilities will be the exception here, substituting other senses to rely on that may be different from most law students' learning approaches. For example, some blind students will rely on tactile stimulation when they read Braille, instead of the visual stimulation most law students rely on when they read printed text.

71. *Id.* at 26.

72. *Id.*

73. *Id.* at 27.

74. *Id.*

75. A guide dog and both tactile and kinesthetic stimulation may inform a student who is blind.

tures, quickly preparing students to achieve higher level learning objectives, such as actually using that space effectively.

B. *Set*

“Set is the preparatory adjustment for a particular kind of action or experience. This is the task preparation phase.”⁷⁶ Set is defined as “a preparatory adjustment or readiness for a particular kind of action or experience.”⁷⁷ This preparatory phase may include:

- “mental set – readiness, in the mental sense, to perform a certain motor act[.]”⁷⁸
- “physical set – readiness in the sense of having made the anatomical and postural adjustments necessary for the motor act to take place[.]”⁷⁹ and
- “emotional set – readiness in terms of attitudes favorable to the motor act’s taking place.”⁸⁰

Think of the sports official who starts a running race. The starter cries out “ready, set, go!” Then the starting gun goes off. Competitive runners learn how to “get set” in the moments before a race, for optimal physical performance.

In legal education, at the level of “set,” a psychomotor learning objective might entail students being able to configure the furniture and props in a clinic interview room to maximize the likelihood of a successful client intake interview. Inevitably, some students try a few different configurations, moving a chair, sitting in it, pantomiming a gesture toward a nearby vacant chair, and reaching for a notepad on the desk, to prepare comfortable distances and angles between the interviewer’s chair, client’s chair, and the desk. As they undertake this process of moving and essentially trying on furniture arrangements, the students are getting physically set. Some students mutter their way through the process, making transparent how they get mentally and emotionally set, as well. If the psychomotor learning objectives for the interview include a student being “set,” the clinic professor can ask appropriate questions and provide useful feedback on variables to consider, such as the relative size and likely dispositions of the people involved, and the experience, comfort level, and speaking style of the interviewer.

C. *Guided Response*

At the guided response level of learning in the psychomotor domain, students are ready to perform a physical skill, i.e., to select a motor re-

76. *Id.* at 10.

77. *Id.* at 20.

78. *Id.*

79. *Id.*

80. *Id.*

sponse and execute it via imitation.⁸¹ “This is an early step in the development of skill . . . Guided response is the overt behavioral act of an individual under the guidance of the instructor.”⁸² At this level, psychomotor learning objectives emphasize basics that will later be components of more complex skills.⁸³ The learning process here is characterized by imitation and trial and error.⁸⁴

In legal education, a learning objective at the level of guided response in the psychomotor domain might be for students to speak clearly and audibly in a large, first-year Socratic class, projecting the voice so all can hear, as the professor does. For many law students, this way of speaking at first requires conscious effort and some trial and error (plus a modicum of courage). To help students achieve basic voice projection while speaking publicly, a skill they will need long after their Contracts and Torts courses end, the professor could give the class some tips based on personal experience, show a professionally produced video lesson, or invite a theater professor to provide some exercises.⁸⁵ Some students struggle with this skill, for a variety of reasons, and they could meet privately with the professor or another appropriate professional for individualized assistance.⁸⁶

There is no reason this basic skill for practicing attorneys has to be learned haphazardly and unevenly by law students. A law professor could include voice projection as a learning objective in any large, first-semester course syllabus and purposefully teach the skill.

D. Mechanism

In the taxonomy of the psychomotor domain, “mechanism” is defined as “a habitual way of responding.”⁸⁷ In other words, at this level of learning, a physical activity is a “learned response;”⁸⁸ it has become mechanical. The student no longer imitates an expert; the physical skill can be executed mechanically, without consciously thinking it through.

In law school, a learning objective at this level in the psychomotor domain might be for advanced moot court team students to stand at the court room podium during an oral argument with a posture and hand ges-

81. *Id.* at 21.

82. *Id.* at 28.

83. *Id.*

84. *Id.*

85. For suggestions for voice exercises for law students, see Stephen Paskey, *All the Law's a Stage: Using Voice Techniques from Theatre to Improve Presentation and Public Speaking Skills*, ALWD CONFERENCE (June 5, 2015), <http://www.alwd.org/alwd-conference-2015-presentation-materials/>.

86. A few years ago, a law student at the Southern Illinois University School of Law created a local chapter of Toastmasters, to provide a resource for law students and others in the community to learn the full range of public speaking skills.

87. Simpson, *Educational Objectives I*, *supra* note 25, at 20.

88. *Id.* at 21.

tures that are consistently formal yet natural. All students on moot court teams practice this compound physical skill. Most receive feedback on it, which means it is assessed, if only informally. Where moot court is a for-credit course, the professor could consciously include this skill as a mechanism level learning objective.

E. Complex Overt Response

In the psychomotor domain, learning objectives at the level of a complex overt response expect the “resolution of uncertainty” and “automatic performance.”⁸⁹ A learning objective in a course that includes a simulated negotiation, for example, might be for students to gain the ability in the moment to purposely change their body language to a more or less aggressive stance during a simulated negotiation, in response to the flow and needs of the conversation.

This learning objective would fit nicely in any alternative dispute resolution (ADR) courses, such as courses on Negotiation, Arbitration, or Mediation. But law professors need not limit learning objectives in the psychomotor domain to “skills” courses, especially now that all manner of skills and experiential learning increasingly infuses the law school curriculum. The complex overt response of monitoring and modifying body language during a negotiation could also be a learning objective in courses like Labor Law, Sports Law, or Real Estate Transactions.

F. Adaptation

Professor Simpson ended her proposed taxonomy in 1966 querying whether there was a need for another level, “which might be designated as *adapting* and *originating*.”⁹⁰ A few years later, she did, indeed, add “adaptation” and “origination” as two separate, more advanced categories of learning objectives in the psychomotor domain.⁹¹

“Adaptation” is defined as “[a]ltering motor activities to meet the demands of new problematic situations requiring a physical response.”⁹² At such an advanced level, “the individual might be so skilled that he can adapt the action in terms of the specific requirements of the individual performer and the situation.”⁹³

For instance, a learning objective at the level of “adaptation” might be included in a Trial Advocacy course, when the students learn how to prepare witnesses for questioning during depositions or courtroom proceedings. A law student may be well-prepared for a simulated witness preparation session, based on information known about the case and the witness

89. *Id.*

90. Simpson, *Educational Objectives I*, *supra* note 25, at 30.

91. Simpson, *Educational Objectives III*, *supra* note 25, at 54.

92. *Id.*

93. Simpson, *Educational Objectives I*, *supra* note 25, at 30–31.

ahead of time. The student may be ready to remind the witness and pantomime the movements related to how to sit formally or look directly at opposing counsel. Upon meeting the witness, however, the student may need to adjust the preparatory advice—and how it is delivered—based on previously unknown physical aspects of the witness, including that individual's size, voice, demeanor, and general ability to project a physical presence in the space.

G. Origination

The most advanced learning objective in Professor Simpson's taxonomy is "origination." In 1966 when Professor Simpson wondered about the need to add "origination," she suggested that at this level a student "might originate new patterns of action in solving a specific problem."⁹⁴ In 1972, Professor Simpson defined this objective as "[c]reating new motor acts or ways of manipulating materials out of understandings, abilities, and skills developed in the psychomotor area."⁹⁵ Her examples suggest that at this level the learning objective anticipates greater complexity, perhaps involving more than one person.⁹⁶

One example of origination in the context of legal education might be the very law journal symposium at which I had the pleasure of presenting this paper.⁹⁷ The law journal students created a day-long program, which, viewed as an example of physical movement, resembled a piece of choreography. They determined a place for each invited presenter to move to, at particular times, with specific props to use at each location. At certain designated times, I sat in a row in the audience reserved for the presenters and wrote notes with a provided pen and notepad. Then on cue, I walked to the front of the room and took a seat at the panelists' table, where I used the microphone and water bottle provided. On another cue, I moved to stand at the podium to speak for a *very* carefully timed duration, using a pre-positioned microphone and a clicker for advancing projected PowerPoint slides. During another hour, serving as moderator, I stood at the podium to introduce a panel, then took a seat near the podium, and then stood again to call on audience members with questions for the panel. I did not have to determine the location, type, or timing of my movements through the space within the auditorium, because the law journal students who created the symposium had already choreographed my moves and those of the other participants. If their faculty advisor had written out learning objectives for the students and included "origination" as a learning objective in the

94. *Id.* at 31.

95. Simpson, *Educational Objectives III*, *supra* note 25, at 54.

96. *Id.* (listing creation of a dance or a game as examples).

97. Symposium, *The Impact of Formative Assessment: Emphasizing Outcome Measures in Legal Education*, U. DETROIT MERCY L. REV. (March 3, 2017).

pyschomotor domain, she confidently could have checked that box for successful completion.

IV. CONCLUSION

Obviously law professors are not hired for their knowledge of and facility with motor skills. So you may well be thinking that it would be better to leave the psychomotor domain to the professor down the hall who loves organic kale and intones “ohm” every morning or the colleague who buys protein supplements and runs marathons. This approach may be analogous to suggesting that only clinic professors can ask their students to reflect on what they think about the subject matter of a course or only professors teaching the professional responsibility course can ask students to consider an ethical dilemma presented by a particular case. While the affective domain may not be the focus of most law professors’ teaching, it does creep into most courses from time to time. Similarly, there are easy ways to allow the pyschomotor domain to occasionally creep into most law school courses.

Perhaps the easiest first step is to ask students to do a seventh inning stretch, halfway through their time seated in class.⁹⁸ But many law school lesson plans already include opportunities to incorporate movement, without a seventh inning stretch.⁹⁹ Instead of asking students to pair-and-share¹⁰⁰ with someone sitting next to them or to form a small group with their neighbors,¹⁰¹ ask them to work with someone on the other side of the room. Students can move to the front of the room to report their working group’s results, demonstrate a lawyering skill, or present a skit of important case facts. Most routine instructions can be assigned to a student to deliver in the front of the room.¹⁰² Some law professors are even reverting to the

98. See Aubrecht, *supra*, note 4.

99. See generally MARCIA L. TATE, “SIT & GET” WON’T GROW DENDRITES: 20 PROFESSIONAL LEARNING STRATEGIES THAT ENGAGE THE ADULT BRAIN (2004) (providing suggestions for adding physicality to any type of adult education, including professional training for colleagues).

100. For a summary of this teaching approach see 2. *Think-pair-share*, NEW YORK U., <https://www.nyu.edu/faculty/teaching-and-learning-resources/strategies-for-teaching-with-tech/best-practices-active-learning/active-learning-techniques/techniques-2.html> (last visited January 15, 2018).

101. See TEACHING THE LAW SCHOOL CURRICULUM (Steven Friedland & Gerald Hess eds., 2004) (providing a myriad of useful examples of small group work in law school courses).

102. This approach mimics the practice of radio host Michael Feldman, who had audience volunteers read the otherwise dull disclaimers for a call-in quiz on his radio show, *Whad’ya Know?* (PRI radio series 1985–2016).

practice of asking law students to stand up when they are called on in class.¹⁰³

Perhaps counter-intuitively, written assignments also provide many opportunities to teach law students to move in the physical world. If students work on a written assignment in class, they can move to the podium computer to type in some short text (a waiver, a question presented, a point heading), for group feedback. A professor might gauge student understanding or focus a discussion by starting class with a three-minute free-write exercise,¹⁰⁴ handwritten,¹⁰⁵ and then discuss both the substance and technique of the free-write.¹⁰⁶

Outside the classroom, too, professors can disrupt online habits and create moments when students must operate in and move through the physical world. For example, a meeting with a student to discuss the topic of her law journal article, seminar paper, or independent study could become a “walk and talk” session.¹⁰⁷ A research exercise could require students to move through the law library, find a book, and unlock the mystery of the color-coded tomes.¹⁰⁸ In any law school course with a research assignment, students can be instructed to print out their most promising research results and then highlight and annotate hard copies by hand.¹⁰⁹ Useful neural paths also develop via the task of physically organizing hard copies of course materials into three-ring binders. To understand problems in the organization of an exam essay response, a student can spread out the hard copy pages on a large conference room table, see the entire document, and physical-

103. Law professors I know who are using this approach explain why to students, provide reasonable accommodations, and do not channel Professor Kingsfield. See *THE PAPER CHASE* (Twentieth Century Fox Film Corp. 1973).

104. See Susan K. Sloane, *Frequently Asked Questions & Answers: In-Class Writing Exercises*, http://www.lwionline.org/uploads/FileUpload/In_Class_Writing_Exercises.pdf (last visited Jan. 20, 2018) (providing information and resources for incorporating writing exercises in the law school classroom).

105. See Levy, *supra* note 3, at 298–303 (explaining the advantages of handwriting throughout the learning process).

106. See also Burgess, *Deepening*, *supra* note 27, at 72–74 (describing in-class visual exercises for cognitive skills that veer fully into the psychomotor domain).

107. See Ferris Jabr, *Why Walking Helps Us Think*, *NEW YORKER* (Sept. 3, 2014), <http://www.newyorker.com/tech/elements/walking-helps-us-think>; see Gary Watt, *The Moving Experience of Legal Education*, in *THE ARTS AND THE LEGAL ACADEMY: BEYOND TEXT IN LEGAL EDUCATION*, *supra* note 8, at 135 (tracing the “respectable pedigree” of learning while walking back to Aristotle); *id.* at 137–38 (describing ways in which walking benefits cognition, including the need to respond to displacement, the activation of all four major brain lobes, and the positive effects of natural light).

108. Increasingly first-year law students express a sense of mystery or fear about the rows of books with matching spines in the law library. They respond well to this video: Knut Naerum, *Medieval Helpdesk*, <https://www.youtube.com/watch?v=pQHx-SjgQvQ> (2007).

109. See Levy, *supra* note 3, at 291–98 (explaining the advantages of reading hard copies throughout the learning process).

ly move sections around. Students in courses in which time sheets are appropriate could also record time spent on short breaks to stretch and move. Many students benefit from these and similar ways of functioning in the tactile world and moving in physical space as they complete written assignments of increasing complexity in law school.

For professors who are comfortable inviting more physical work into their courses,¹¹⁰ the possibilities are limitless. For instance, a law professor in London assigns his students to walk through the city, recording their physical reactions to indicia of the law that they encounter.¹¹¹ Some first-year Property Law courses include an assignment that requires students to move through and look at the physical world around them, find an actual easement, photograph it, and submit the photograph along with a text explanation.¹¹² At some law schools, professors are teaching mindfulness skills for lawyers, purposefully helping law students access the synergies between the cognitive, affective, and psychomotor domains.¹¹³ A law school could offer an upper level elective course on Theater Skills for Lawyers, and the enrolled students could be assigned to role-play clients when first-year students conduct simulated client intake interviews. A law professor teaching a course which requires a deeper understanding of the law's social impact could conduct an in-class exercise that causes students to physically experience being in a dominant or disadvantaged social group.¹¹⁴

Law students will benefit when law professors “design educational programs which are sensitive to the full range of objectives impacting on the learner and the instructional setting.”¹¹⁵ Students will gain efficacy and efficiency in their learning when they marshal more neural pathways and

110. For some cautions about incorporating embodied learning approaches, see Wagner & Shahjahan, *supra* note 10, at 251 (acknowledging initial student resistance to new teaching techniques, the “risk of being disciplined by students through the course evaluation process,” and colleagues who may be ill-prepared to evaluate embodied teaching approaches).

111. Andreas Philippopoulos-Mihalopoulos, *Mapping the Lawscape: Spatial Law and the Body*, in *THE ARTS AND THE LEGAL ACADEMY: BEYOND TEXT IN LEGAL EDUCATION*, *supra* note 8, at 119–23; *see also* Watt, *supra* note 107, at 139–46 (describing another walking assignment in a law course).

112. I first heard of this idea from Professor Hokulei Lindsey.

113. *See AALS Balance in Legal Education Bibliography*, UNIVERSITY OF DENVER STURM COLLEGE OF LAW, <http://www.law.du.edu/index.php/aals-balance-in-legal-education-bib> (last visited Oct. 2, 2017) (containing an extensive bibliography of relevant resources); *see also* Austin, *supra* note 7, at 807–18 (summarizing the brain's physiology as learning happens via all three domains); LIN, *supra* note 60 (presenting a full tome of scholarship on and examples of mindfulness techniques used in higher education).

114. *See* Wagner & Shahjahan, *supra* note 10, at 248–49 (describing the use of such a classroom exercise in higher education).

115. Simpson, *Educational Objectives III*, *supra* note 25, at 45.

parts of the brain in their educational efforts.¹¹⁶ “When we inhabit our bodies fully, no matter what vocation is in our lives, we are able to integrate the fullness of our intelligence, incorporating the emotional, kinesthetic, conceptual, and our complete humanity.”¹¹⁷ This type of full presence is what talented lawyers bring to their law practices every day. Law professors can start guiding students toward more integrated intelligence simply by adding to their lesson plans a few explicit learning objectives in the psychomotor domain.

116. Austin, *supra* note 7, at 828–34 (explaining how exercise supports cognitive learning); *id.* at 838–47 (explaining how mind-body connections enhance cognitive learning); *id.* at 846 (explaining how “brain circuits . . . created by movement . . . can be recruited for cognition.”).

117. Snowber, *Knowing*, *supra* note 5, at 59.